## REMARKS/ARGUMENTS

- 1. The amendments made in this reply to the Office communication of November 4, 2005 have the following objectives:
- (a) inactivation of the embedded hyperlinks and/or other form of browser-executable code, identified in Items 6 and 7 of the Office Action (page 41, line 17; page 62, lines 8 and 11, and page 63, line 4);
- (b) removal of an incorporation-by-reference, identified in **Item 8 of the Office Action** (page 17, lines 5-8 and all other such ones);
- (c) In response to **Item 10 of the Office Action**, which notes that the instant specification discloses "words or phrases in the text that are most uniquely associated ... to each cluster (page 11, last paragraph), the proposed amendment (claim 1, lines 4,5) is revised in the claims to conform with the text that was disclosed in the instant specification, in place of the previous phrase "the system attaches...".
- (d) In response to Item 11 of the Office Action, which objects to limitations directed to "a cluster with a superset ..." in the proposed claim 1, steps (c) and (d), and in response to Item 14 of the Office Action, which objects to the limitation "superset" as being vague and indefinite, Applicant responds by revising Claim 1, steps (c) and (d), without using the term "superset".
- 2. In response to Item 6 and 7 of the Office communication of November 4, 2005, which are concerned with inactivation of the embedded hyperlinks and/or other form of browser-executable code, (page 41, line 17; page 62, lines 8 and 11, and page 63, line 4), Applicant notes that the text containing those embedded hyperlinks had already been removed in previous amendments. Accordingly, the instant Amendments 1 and 2 to the specification reiterate the previous amendments in which the embedded hyperlinks had been removed.
- 3. In response to Item 8 of the Office communication of November 4, 2005, which is concerned with an incorporation-by-reference found on page 17, lines 5-8, Applicant has removed

that "incorporation-by-reference" through the instant Amendments to the specification #3 and #4, by removing the term "incorporated by reference". That specification identifies certain "open source" software (the "bow" software toolkit). It is well understood by computer programmers that the term "open source" means that the full text of the computer source code was published, freely available, and in the public domain. Consequently, there is no need to incorporate that open source software by reference, in order to convey to one skilled in the relevant art that Applicant had possession of the claimed invention at the time the application was filed – the skilled artisan could have simply examined the contents of the "bow" software toolkit after downloading it from the Web site that was indicated in the application. Similarly, the other publicly available software that was disclosed, such as djgpp, is not incorporated by reference, even though it was used in the invention.

Applicant also used the phrase "included by reference" in two other locations within the application (in sentences found on page 37, line 18 and page 39, line 13, both of which refer to open source software). In view of Item 8 of the Office Action, Applicant has eliminated use of that term as well, through the instant Amendments to the specification #5, #6, and #7. Amendments #4 and #6 are reiterations of previous amendments, which are made here in order to make clear that the text does not contain embedded hyperlinks.

4. Item 10 of the Office communication of November 4, 2005 notes that the instant specification discloses "words or phrases in the text that are most uniquely associated ... to each cluster (page 11, last paragraph)". Therefore, Applicant has modified the previous claim (claim 1, lines 4,5) to conform with the wording that is found in the instant specification. The revised claim replaces the previous phrase "the system attaches...", to which the Examiner objected because that phrase was not found in the instant specification.

The relevant disclosure of the instant specification is on page 11, beginning on line 15:

In one embodiment of the invention, a computer program module obtains literature abstracts and other text corresponding to the above-mentioned literature unique identifiers. A computer module organizes that text in computer files according to the clustering of the corresponding genes, then constructs a mathematical model of the text. The purpose of the model is to identify words or phrases in the text that are most uniquely associated with the text corresponding to each cluster, and that also best distinguish each cluster from the others.

It was not clear in the previous proposed Claim 1 (lines 4-5) that the annotation of groups of subsets of genes (clusters) involves the identification of words or phrases in literature abstracts or other text, as was disclosed in the above-cited text from page 11 of the specification. Accordingly, the newly proposed Claim 1, lines 4-5, replaces "in terms of different words and phrases that the system attaches to different individual subsets of genes, comprising:" with the phrase "by identifying words and phrases that are most uniquely associated with literature abstracts and other text corresponding to each subset of genes, comprising:." The written basis of the claim, that annotation of a group of subsets of genes with words or phrases ... is "by identifying words or phrases that are most uniquely associated with literature abstracts and other text corresponding to each subset of genes", is the sentence identified by the Examiner, with "cluster" replaced by its meaning "subset of genes", and with "the text" replaced by the antecedent from the previous two sentences in the disclosure, namely, "literature abstracts and other text".

5. In response to Item 11 of the Office communication of November 4, 2005, which describes limitations that the Examiner did not find in the instant specification (Claim 1, steps c and d – directed to "a cluster with a superset"), Applicant responds by revising Claim 1, steps (c) and (d), without using the terms "superset".

Justification for the revised Claim 1, step (c) is on page 23, line 14 through page 25, line 2 (for the association of a set of literature documents with each gene in the set of genes), and page 25, line 3 through page 26, line 19 (for the receipt of text of part or all of the literature documents). Justification for the revised Claim 1, step (d) is on page 36, line 10 through page 37, line 3.

6. In Item 14 of the Office communication of June 21, 2005, the Examiner finds that the limitation "superset" in Claim 1, steps (c) and (d), is vague and indefinite. Applicant responds by revising Claim 1, steps (c) and (d), without using the terms "superset".

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- 7. Applicant requests pursuant to MPEP 707.07(j) that the Examiner draft one or more suitable claims for the applicant, if the Examiner finds patentable subject matter disclosed in this application, but feels that Applicant's present claims are not entirely suitable.
- 8. Applicant thanks the Examiner for thoughtful consideration of this application as expressed in the Office action, because Applicant believes that his responses to the Examiner's action would strengthen the application.

Respectfully submitted,

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